

some cardinal techniques for attracting birds

FOOD AND SHELTER for birds are mainly a matter of vegetation. Plants therefore are essential to your efforts to improve your land for birds.

Plantings can beautify your property as well as attract birds. Birds often feed on berries, and many of their favorites are bright hued and decorative. Hedges and dense shrubs provide nest sites and shelter and also a landscape background. Trees for nesting and singing offer shade and beauty to the householder. Sunflowers and other colorful annuals are seed producers and some provide nectar. A small wildlife pool or a bird bath is an attractive addition to the landscape.

Birds are an important part of city and country living. Their coming and going, their bright colors, and their singing are so delightful that many people often wonder how to assure their presence and increase their numbers.

It's easy to attract birds. You do it by providing more of the things they need most. Birds require food, water, and shelter for nesting, resting, and safety. If any of these are absent or in short supply, birds will be scarce. By providing for their needs, you can increase the numbers and even the kinds of birds that will visit your yard.

Birds like variety—so remember this when deciding what plants to use in your wildlife landscaping. Create a varied pattern by intermingling plant species, sizes, and shapes. Give birds a choice of places for their activities—shrubs, trees, flowers, and grasses. Give them a choice of food sources—seeds, nuts, fruits, berries, and flower nectar. Many songbirds combine these plant foods with insects, worms, and other animal foods.

By knowing the wildlife value of

plants now on your property, you can make plantings that will add diversity to the landscape and at the same time provide needed food and shelter for birds. Many common shade trees and landscape shrubs, for example, yield little food for birds. Autumn-olive, cherry, and fruit-bearing shrubs are helpful additions. Yards and grounds that have only deciduous trees and shrubs are usually short on winter shelter for birds. They can be improved by adding junipers, cedars, yews, and other evergreens.

You have endless choices of combinations to consider in creating a land-scape that attracts birds: hardwoods and conifers; vines, shrubs, and low trees; grasses and flowers. If your yard is small, you may be limited to single specimens of different plants. With larger grounds, you can use hedges, clumps, food plots, and other massed plantings. If you have a wooded area, a clearing within it can create more edges for birds and lend variety to the landscape.

Hedges and rows of trees screen off unpleasant views and reduce noise from highways. In crowded neighborhoods they offer privacy for your backyard. And they attract birds to your place year after year.

Conifers, autumn-olive, dogwood, cotoneaster, or a combination of these make good living screens.

Open stretches of lawn and fields with few if any trees or shrubs are favored

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by meadowlarks, bobolinks, and several kinds of sparrows. In seldom-mowed open areas, try planting a variety of native grasses. They protect the soil, and birds and mammals like the variety of foods. A windbreak of red cedar, spruce, or pines, with a crabapple tree tucked in on the sheltered side, gives birds a warm, safe place to rest when the snow is deep. A food plot or feeder nearby helps keep the birds with you through the snowy months.

Living fences or hedges of honeysuckle, dogwood, or autumn-olive can reinforce and even replace wire fence along property lines, and can protect the house area. Cardinals, brown thrashers, and mockingbirds find living fences ideal.

Food plots of millets (browntop, foxtail, or proso), grain sorghum, corn, or sunflowers will attract the "seedeaters," such as goldfinches, cardinals, juncos, and sparrows. Wild bristlegrasses and ragweeds also attract many birds. A food plot can be small, perhaps several short rows, or large if you have the space.

When planting for birds, you need to consider soil, slope, drainage, exposure, and climate as well as your personal

wishes. Added benefits occur if plantings provide shade, stabilize the soil, and control potentially damaging water runoff.

In general, trees and shrubs that attract birds grow satisfactorily on well-drained, fairly fertile, somewhat loamy soils not particularly suited for vegetables and flowers. The ideal soil has a loose, loamy upper layer 18 inches or more deep, and is neutral or slightly acid.

Use plantings of annuals, such as coreopsis, marigolds, sunflowers, or petunias, to provide more kinds of bird feeds, to balance landscape spacing, or to fill in along walks and other manmade structures.

Open water of some kind is needed by most birds. A small pool with stones in the shallow edges draws birds to drink and bathe. They use the dry tops of the rocks for preening sites after bathing. A conventional birdbath may be put on a pedestal or set on the ground.

Despite your best planting efforts you may not be able to provide a year-round supply of food for birds nor a full variety of nest sites. And there may be times when the birds have eaten



Autumn-olive berries, in Pennsylvania



Martin house in Arkansas is mounted on a telescopic pole to facilitate cleaning.

every dogwood berry, autumn-olive, crabapple, or other fruits and seeds of your plantings. So plan to use bird feeders, nest boxes, and birdbaths to supplement your plantings and land-scaping.

Feeders stocked with fruits and grains are welcome food sources in late winter after fruits from your plantings have been depleted. Scattering food on the ground will attract birds such as bobwhite, mourning dove, and others that rarely go to feeders.

Certain kinds of nesting boxes, houses, and shelves attract certain kinds of birds. The ones to choose depend on what kinds of birds nest in your neighborhood.

Select feeders and boxes of materials and design that blend with your landscaping. The more simple and natural they look, the better they are.

Be sure your landscaping allows you to see the birds. Put plants, feeders,

and bath or pool where they can be seen from windows, patio, or terrace. Choose the kinds of plants reported to have high bird use and adapted to your area. Attention to periods of blooming and fruiting makes possible a succession of floral displays and bird foods.

You can get further information on suitable plants from your local soil conservationist or county extension agent. Nurserymen, landscape architects, and bird societies can also help.

Your local library will have useful books and leaflets on attracting birds.

Some Plants Attractive to Birds

Autumn-olive—Elaeagnus umbellata Bird use: 15 species

December.

Ornamental value: Large, spreading shrub with gray-green foliage, fragrant, small, yellowish blooms; abundant red fruits.

Adaptation: Moist to dry soil; sun to light shade; Cardinal variety, winter hardy. In bloom: May-July. In fruit: September-

Height: 8 to 15 ft.

Sources: Commercial nurseries, several State nurseries.

Dogwood—Cornus spp. Bird use: 47 species

Ornamental value: Variable forms: small to large shrubs, small trees; leaves strongly veined, red to bronze in the fall; whitish to yellowish blooms; fruits bunched or clustered—red, blue, or white.

Adaptation: Moist to well-drained soil; sun to shade.

Height: shrub, 5 to 8 ft.; tree. 20 to 30 ft.

In bloom: April-June. In fruit: August-February

Sources: Commercial and State nurseries, wild transplants, cuttings.

Mountain-ash-Sorbus spp.

Bird use: 20 species

Ornamental value: Medium-size trees with compound leaves; flat, white flower clusters; bright red to orange berry clusters. Adaptation: Moist to dry soil; sun; cool

climate.

In bloom: May-June. In fruit: August-March

Height: 20 to 40 ft.

Sources: Commercial nurseries, wild transplants.

Russian-olive-Elaeagnus angustifolia

Bird use: 31 species

Ornamental value: Large shrub to small tree; introduced species widely established in dry alkaline sites in West; silvery yellow to pink fruits persist nearly all winter; narrow green leaves silvery below.

Adaptation: Well-drained to dry soil; sun. In bloom: June-July. In fruit: September-February

Height: 15 to 25 ft.

Sources: Commercial nurseries and wild transplants.

Firethorn-Pyracantha spp.

Bird use: 17 species

Ornamental value: Medium to large shrubs; white blooms; showy, orange to red fruits.

Adaptation: Moist to well-drained soil; sun to partial shade.

The fruit of mountain-ash is available to wildlife even after heavy snow has covered other food sources in this Michigan scene.



In bloom: June. In fruit: September-March Height: 6 to 12 ft.

Sources: Commercial nurseries.

Sunflower-Helianthus spp.

Bird use: 52 species

Ornamental value: Tall annual plant; has large vellow flowers.

Adaptation: Well-drained soil; sun.

In bloom: June-August. Ripe seed: August-September

Height: 4 to 8 ft.

Sources: Commercial seed stores.

Crabapple—Malus spp.

Bird use: 29 species

Ornamental value: Small to medium-size trees; showy, white to pink blooms; red, purple, orange, or yellow fruits.

Adaptation: Well-drained soil; sun and light shade.

In bloom: April-May. In fruit: September-April

Height: 10 to 30 ft.

Sources: Commercial nurseries, grafting, budding.

Elderberry—Sambucus spp.

Bird use: 50 species

Ornamental value: Tall shrubs; flat, whitish flower clusters; red to purple-black fruits.

Adaptation: Moist to well-drained soil; sun to shade.

In bloom: May-July. In fruit: July-October Height: 5 to 8 ft.

Sources: Commercial nurseries.

American Cranberrybush—Viburnum trilobum

Bird use: 28 species

Ornamental value: Tall upright shrub; showy flat clusters of whitish flowers; glossy scarlet fruit clusters.

Adaptation: Deep, moist to well-drained soil; sun to light shade.

In bloom: May-June. In fruit: September-May

Height: 8 to 12 ft.

Sources: Commercial nurseries, some State nurseries, wild transplants or cuttings.

Cherry-Prunus spp.

Bird use: 49 species

Ornamental value: Variable forms; shrubs, small to large trees; small fine-toothed leaves, yellow in fall; showy white flower clusters or drooping spikes; small, bright-red to black fruits.

Height: shrub, 5 to 15 ft.; tree, 20 to 75 ft

Adaptation: Moist to dry soil; sun to light shade.

In bloom: April-June. In fruit: Variable with species, June-November.

Sources: Commercial nurseries, wild transplants.

Wild Plum—Prunus americana

Bird use: 16 species

Ornamental value: Large shrub to small tree; suited to large yards or fields; spreads by suckers to form clumps; fragrant pink and white flowers; hardy red or yellow fruits.

Adaptation: Moist to well-drained loamy soil: sun.

In bloom: April-May. In fruit: July-October

Height: 10 to 30 ft.

Sources: Commercial nurseries, wild transplants.

Cotoneaster—Cotoneaster spp.

Bird use: 6 species

Ornamental value: Medium-size shrub; usually planted as a hedge but also as ground cover; dark-green leaves turning red-gold in fall; small pink or white flowers; showy red, orange, or black fruits.

Adaptation: Moist to well-drained soil; sun.

In bloom: May-June. In fruit: September-November

Height: 2 to 10 ft.

Sources: Commercial nurseries.

Tatarian Honeysuckle—Lonicera tatarica Bird use: 18 species

Ornamental value: Large shrub; pink to yellow-white blooms; yellow to red fruits.

Adaptation: Well-drained to dry soil; sun to light shade.

In bloom: May-June. In fruit: July-September

Height: 5 to 15 ft.

Sources: Commercial nurseries.

Redcedar-Juniperus virginiana

Bird use: 25 species

Ornamental value: Medium-size coniferous tree (many varieties); dense, green to blue-green needles; small, dusty-blue, berrylike cones.

Adaptation: Moist to dry soil; sun to light shade.

In bloom: April-May. In fruit: September-May

Height: 15 to 40 ft.

Sources: Commercial nurseries, some State nurseries, and wild transplants.

Bittersweet—Celastrus scandens Bird use: 12 species

Ornamental value: Twining vine; palegreen flowers; bright-red berries in yellow or orange husks.

Adaptation: Well-drained to dry soil; light

In bloom: May-June. In fruit: September-December

Height: Climbs to 25 ft.

Sources: Commercial nurseries, some State nurseries, cuttings.

Holly—Ilex spp. Bird use: 20 species

Ornamental value: Variable forms: upright rounded shrubs, small to medium-size trees; many varieties; dark green foliage, evergreen or deciduous; small whitish blooms, bright-red, black, or yellow fruits (very persistent).

Adaptation: Moist to well-drained soil; sun to shade.

In bloom: April-June. In fruit: September-

Height: Shrub, 5 to 15 ft.; tree, 30 to 50 ft.

Sources: Commercial nurseries, wild transplants, cuttings.

Hawthorn—Crataegus spp.

Bird use: 19 species

Ornamental value: Small trees; pale-green toothed leaves; abundant, clustered, white flowers; orange to red fruits (very persistent).

Adaptation: Deep, moist to dry soil; sun to shade.

In bloom: May-June. In fruit: October-March

Height: 15 to 30 ft.

Sources: Commercial nurseries.

For further reading:

U.S. Department of Agriculture, Conservation Plantings for the Northeast: Invite Birds to Your Home. PA 940, Washington, D. C. 20250, 1969.

—, More Wildlife Through Soil and Water Conservation. Agriculture Information Bulletin 175, Washington, D. C. 20250, 1971.



bees, butterflies, and blossoms: our useful garden insects

MOST OF OUR GARDEN PLANTS have flowers at some time during their growing cycle. Many, of course, are ornamentals planted primarily for the flowers they produce. Many useful insects find the flowers just as attractive as we do, but for different reasons.

Flowers originally developed showy changes to attract the attention of insects for pollination. Later modifications adapted some flowers for pollination by birds, and even bats. Many flowers returned to dependence upon the original agent of pollen dispersal, the wind. These have usually lost the eye-catching colors, forms, and odors that characterize flowers as most of us know them. Although some of these (like the grasses) are important in the garden, we grow them for other features than flowers.

Fundamental to all flowers are the floral structures required for reproduc-

tion. The female elements (stigma, style, and ovary) and the male elements (pollen, anther, and stamens) may be on the same or different plants. If on the same plant, they may be in the same or. different flowers. In general, the farther apart the sexual parts are, the more dependent the plants become upon an agent of pollination to distribute the male pollen to the female pistil.

Hummingbirds and other birds provide this service for a few plants, bats also are known to pollinate some plants, but the most abundant and important pollinators are the insects that visit the flowers for food.

The pollen usually available in flowering plants provides the protein food required by many insects, particularly the bees. It is often produced in great quantity. Many kinds of bees depend upon it for supplying their young with protein, lipids, vitamins, and minerals.